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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,349	01/30/2002	Joel Wacknov	153501-0403	5210

7590 03/31/2004

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.  
100 NEW YORK AVE, NW  
WASHINGTON, DC 20005-3934

EXAMINER
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CUEVAS, PEDRO J

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Supplemental  
Notice of Allowability**

Application No.

10/066,349

Examiner

Pedro J. Cuevas

Applicant(s)

WACKNOV ET AL.

Art Unit

2834

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on January 23, 2004.
2. ☒ The allowed claim(s) is/are 1-44.
3. ☒ The drawings filed on 30 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>1, 2004</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                              | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on January 23, 2004 was filed after the mailing date of the Non-Final Rejection on July 25, 2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner. Only the three pages missing the examiners initials are included with this Office Action.

### ***Response to Arguments***

2. Applicant's arguments see page 13, filed January 23, 2004, with respect to claims 1-44 have been fully considered and are persuasive. The U.S.C. § 103 rejections of claims 1-44 have been withdrawn.

Geis et al. disclose the construction of a turbogenerator/motor controller with ancillary energy storage/discharge comprising:

- a fuel source to provide fuel;

- a turbogenerator, coupled to the fuel source, to generate AC power, including:

- a shaft,

- a generator, coupled to the shaft, to generate the AC power,

- a compressor, coupled to the shaft, to provide a supply of compressed air,

- a combustor coupled to receive the supply of compressed air and the fuel,

- said combustor to combust the fuel and to provide exhaust gas,

Art Unit: 2834

a turbine coupled the shaft and coupled to receive the exhaust gas, said exhaust gas to flow through the turbine to control a rotational speed of the shaft, and

a recuperator including a high-pressure side coupled between the compressor and the combustor, and a low-pressure side coupled to receive the exhaust gas from the turbine;

a power controller, coupled to the turbogenerator; and

a battery controllably coupled across the output lines, under control of the power controller, to charge the capacitor.

Edelman et al. teach the construction of a turbogenerator power control system and method having:

a power controller including an AC/DC power converter, said AC/DC power converter to convert said AC power generated by the turbogenerator to DC power on output lines to supply a DC load, said power controller to regulate the fuel to the turbogenerator, independent of a DC voltage on the output lines for the purpose of preventing constant acceleration and deceleration of the engine to meet the changing load demand; and

a capacitor coupled across the output lines and located internal to the power controller, said capacitor to source power to and/or sink power from the output lines, due to load changes by the DC load, to stabilize a DC voltage on the output lines.

Anderson et al. teach the construction of electrochemical capacitors for the purpose of providing control over the properties of the resultant metal oxide materials in the construction of electrochemical capacitors.

Buckley, Jr. et al. teach the construction of control system and method for controlling a gas turbine in accordance with the temperature conditions having a temperature sensor for the purpose of sensing the temperature of the system.

*Allowable Subject Matter*

3. Claims 1-44 are allowed.
4. The following is an examiner's statement of reasons for allowance.

The prior art of record, taken alone or in combination, fails to teach the construction of a power generation system as described on:

independent claims 1 and 12, comprising a capacitor coupled across the output lines, to source power to, and/or sink power from, the output lines due to load changes by the DC load, to stabilize a DC voltage on the output lines;

independent claim 23, comprising a capacitor controllably coupled, under control of the power controller, across the DC bus via a second DC/DC power converter to source power to and/or sink power from the DC bus, due to load changes by the DC load;

independent claim 34, comprising a capacitor coupled across the output lines to source power to and/or sink power from the output lines due to load changes, said power controller regulating a speed of the turbine, independent of a DC voltage on the output lines;

Art Unit: 2834

independent claim 38, comprising a capacitor coupled across the output lines to source power to and/or sink power from the output lines due to load changes by the DC load, said power controller being configured to regulate a speed of the turbine, independent of a DC voltage on the DC bus;

independent claim 42, comprising a capacitor being controllably coupled across the DC bus via the second DC/DC power converter, under control of the power controller, to source power to and/or sink power from the DC bus due to load changes by the DC load, said power controller being configured to regulate a speed of the turbine, independent of a DC voltage on the DC bus.

Dependent claims 2-11, 13-22, 24-33, 35-37, 39-41, and 43-44 are considered allowable by their respective dependence on allowed independent claim 1, 12, 23, 34, 38, and 42.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (571) 272-2021. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pedro J. Cuevas  
March 23, 2004



**Nicholas Ponomarenko**  
**Primary Examiner**  
**Technology Center 2800**